

ABSTRACT OF THE DISCLOSURE

A process for manufacturing a metal wire having a steel core and a metal coating layer in a radially outer position with respect to the steel core. The metal coating layer includes an alloy of at least two metal components. The process includes the steps of coating the steel core by depositing onto the steel core separate layers of the two metal components, each layer having a thickness not greater than 50 nm, and drawing the coated core to form the alloy of the at least two metal components. Preferably, the deposition step is carried out by means of a plasma deposition technique.